receiver ICS user address in the transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device at a transmitting side and an access control device at an incoming side.

133. An integrated information communication system, wherein an external ICS user frame having an inherent ICS user address system ADX is converted to an internal ICS network frame having an ICS network address system ADS on the basis of management of a conversion table in an access control device, the ICS network frame comprises a network control section and a network data section, the network control section stores an address according to the ICS network address system ADS, the network data section includes the ICS user frame, the ICS network frame are transmitted through an interior in accordance with rules of the ICS network address system ADS, and the ICS user frame is restored from the ICS network frame and transferred to another external information communication equipment, and

an internal address system is determined regardless of an external user address system, the ICS network address is given to an ICS logical terminal, and when a set of ICS logical terminal identification information, a transmitter ICS user address, and a receiver ICS user address is determined, an incoming ICS network address is registered as a record of the conversion table so as to be set uniformly, and when it is found that the identification information of the ICS logical terminal which the ICS user frame inputted, and a transmitter ICS user address and a receiver ICS user address in the ICS user frame are registered together in the record of the conversion table, the ICS user frame is converted to the ICS network frame.

134. An integrated information communication system according to claim 133, wherein, on the basis of an ICS domain name, a conversion table server prepares new items of the conversion table including the ICS network address and the ICS user address obtained by forwarding an inquiry to a domain name server.

135.   An integrated information communication system, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information at a transmitting side and a receiver ICS user address in the transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device at the transmitting side and an access control device at an incoming side, and, on the basis of an ICS domain name, a conversion table server prepares new items of a conversion table including an ICS network address and an ICS user address obtained by forwarding an inquiry to a domain name server.

136.   An integrated information communication system comprising two or more access control devices, wherein the access control devices include a conversion table, an ICS user frame transmitted by a user is inputted to an access control device of a transmitting side via an ICS logical terminal at a termination of a user communication line and becomes an ICS network frame in the access control device of the transmitting side, the ICS network frame is transferred through the interior of the integrated information communication system and reaches an access control device of the incoming side, the ICS user frame is restored from the ICS network frame in the access control device of the incoming side, and the restored ICS user frame reaches another user via a user communication line at a destination side, and

on the basis of an ICS domain name, a conversion table server prepares new items of the conversion table including an ICS network address and an ICS user address obtained by forwarding an inquiry to a domain name server, and a user transmits and receives the ICS user frame between an external IP terminal of the integrated information communication system and an IP terminal of another user, and at this time, IP frame communication is carried out by using the new items of the conversion table.

137.   An access control device, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information and a receiver ICS user address in the transmission ICS user frame is

determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device at a transmitting side and an access control device at an incoming side.

138. An access control device, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information, and a transmitter ICS user address and a receiver ICS user address in the transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device at a transmitting side and an access control device at an incoming side.

139. An access control device, wherein an external ICS user frame having an inherent ICS user address system ADX is converted to an internal ICS network frame having an ICS network address system ADS on the basis of management of a conversion table in the access control device, the ICS network frame comprises a network control section and a network data section, the network control section stores an address according to the ICS network address system ADS, the network data section includes the ICS user frame, the ICS network frame are transmitted through the interior accordance with rules of the ICS network address system ADS, and the ICS user frame is restored from the ICS network frame and transferred to another external information communication equipment, and

an internal address system is determined regardless of an external user address system, an ICS network address is given to the ICS logical terminal, and when a set of logical terminal identification information, a transmitter ICS user address, and a receiver ICS user address is determined, an incoming ICS network address is registered as a record of the conversion table so as to be set uniformly, and when it is found that the identification information of the ICS logical terminal which the ICS user frame inputted, and a transmitter ICS user address and a receiver ICS user address in the ICS user frame are registered together in the record of the conversion table, the ICS user frame is converted to the ICS network frame, and

on the basis of an ICS domain name, a conversion table server prepares new items of the conversion table including an ICS network address and an ICS user address obtained by forwarding an inquiry to a domain name server.

140. A charging method, wherein an integrated information communication system includes two or more access control devices, and an external transmission ICS user frame is inputted to an access control device at a transmitting side via an ICS logical terminal at a termination of a user communication line, and an internal ICS network frame is formed in the access control device at the transmitting side;

when an ICS user address of a user who transmitted the ICS user frame is registered in the access control device, an internal ICS network frame is formed, and when the ICS user address of the user who is a source of transmission is not registered in the access control device, the transmission ICS user frame is destroyed; and

the formed ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device at an incoming side, and the ICS user frame is restored from the ICS network frame in the access control device at the incoming side, and a communication fee is charged to the user who transmitted the ICS user frame by forming the ICS network frame or destroying the ICS user frame on the basis of whether or not the transmission source address of the ICS user frame is registered in the access control device at the transmitting side.

141. A charging method, wherein an integrated information communication system includes two or more access control devices, and an external transmission ICS user frame is inputted to an access control device at a transmitting side via an ICS logical terminal at a termination of a user communication line and becomes an internal ICS network frame in the access control device at the transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device at an incoming side, and the ICS user frame is restored from the ICS network frame in the access control device at the incoming side; and

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an ICS network address identifying the ICS logical terminal is given to the ICS logical terminal at the termination of the user communication line, and on the basis of whether or not the ICS network address at the transmitting side is registered in a conversion table of the access control device at the transmitting side, a transmitted ICS user frame is converted to the internal ICS network frame, and a communication fee is charged to the user communication line by selecting whether or not the ICS network frame is transferred through the interior of the integrated information communication system.

142.   An integrated information communication system, wherein, on the basis of an ICS user address given to an ICS logical terminal at a transmitting side and an external transmission ICS user frame, an ICS network address of an internal ICS network frame is determined, and telephone communication is made possible by transmitting and receiving an ICS user frame, in which a digitized voice is stored, between users outside an integrated information communication system, via the integrated information communication system which, on the basis of the determined ICS network address, determines the ICS logical terminal at the incoming side which should transmit a transmission ICS network frame.

143.   An integrated information communication system comprising two or more access control devices, wherein the access control devices include a conversion table, and an ICS user frame transmitted by a user is inputted to an access control device at a transmitting side via an ICS logical terminal at a termination of a user communication line, and becomes an ICS network frame in the access control device at the transmitting side, and the ICS network frame is transferred through the interior of the integrated information communication system and reaches an access control system at an incoming side, and the ICS user frame is restored from the ICS network frame in the access control system at the incoming side, and the restored ICS user frame reaches another user via a user communication line at a destination side;

on the basis of a telephone number, a conversion table server prepares new items of the conversion table including an ICS network address and an ICS user address obtained by forwarding an inquiry to a domain name server; and

an ICS user frame in which a digitized voice is stored is transmitted and received among two or more users, and telephone communication among the users is made possible by using the new items of the conversion table at an interior of an access control device in the integrated information communication system.

144. An integrated information communication system, wherein a transmission ICS user frame is inputted from an ICS logical terminal of an access control device at a termination of a user communication line, and an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to an ICS logical terminal at a transmitting side and an external transmission ICS user frame, and an ICS logical terminal at an incoming side to which the transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address; and

the access control device has encoding means and decoding means, and when a code class of the conversion table is specified to be "1" or "0" at the time of ICS encapsulation, the ICS user frame is encoded by the encoding means and is converted to the ICS network frame and is transmitted through an interior of the integrated information communication system, and at the time of ICS reverse-encapsulation, a code class of a control section of the ICS network frame is investigated, and the ICS network frame is returned to an original ICS user frame by the decoding means in accordance with the designation of "1" or "0".

145. An integrated information communication system, wherein a transmission ICS user frame is inputted from an ICS logical terminal of an access control device at a termination of a user communication line, and an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to an ICS logical terminal at a transmitting side and an external transmission ICS user frame, and an ICS logical terminal at an incoming side to which a transmission

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ICS network frame is to be transmitted is determined on the basis of the determined ICS network address; and

an integrated information communication system receiver embeds, in a roaming terminal, an ICS domain name and an ICS user address of a roaming terminal user, a special roaming special service number for the roaming terminal, an ICS user address of a connection server, and a code function and code related data, and when the roaming terminal is connected to another access control device and starts inter-company communication, the ICS domain name, the code roaming special service number, the ICS user address of the connection server, the code function, and the code related data are used.

146. An integrated information communication system, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information of a transmitting side and a receiver ICS user address in a transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device of the transmitting side and an access control device of an incoming side; and

an integrated information communication system receiver embeds, in a roaming terminal, an ICS domain name and an ICS user address of a roaming terminal user, a special roaming special service number for the roaming terminal, an ICS user address of a connection server, and a code function and code related data, and when the roaming terminal is connected to another access control device and starts inter-company communication, the ICS domain name, the code roaming special service number, the ICS user address of the connection server, the code function, and the code related data are used.

147. An integrated information communication system, wherein a transmission ICS user frame is inputted from an ICS logical terminal of an access control device at a termination of a user communication line, and an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to the ICS logical terminal at a transmitting side and an

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external transmission ICS user frame, and an ICS logical terminal at an incoming side to which a transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address; and

the access control device includes a telephone line converting section or a portable telephone line converting section having functions of converting and reversely converting an interface of a telephone line or a portable telephone line to an ICS network frame transferable in an ICS network.

148. An integrated information communication system, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information at a transmitting side and a receiver ICS user address in a transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device of the transmitting side and an access control device of an incoming side; and

each access control device includes a telephone line converting section or a portable telephone line converting section having functions of converting and reversely converting an interface of a telephone line or a portable telephone line to an ICS network frame transferable in an ICS network.

149. An integrated information communication system, wherein a transmission ICS user frame is inputted from an ICS logical terminal of an access control device at a termination of a user communication line, and an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to the ICS logical terminal at a transmitting side and an external transmission ICS user frame, and an ICS logical terminal at an incoming side to which the transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address; and

the access control device includes a CATV line converting section having functions of converting and reversely converting an interface of a CATV line to an ICS network frame transferable in an ICS network.

150. An integrated information communication system, wherein, when a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and a set of ICS logical terminal identification information at a transmitting side and a receiver ICS user address in a transmission ICS user frame is determined, an ICS network communication line in which an ICS network frame is transferred is determined between an access control device at the transmitting side and an access control device at an incoming side; and

each access control device includes a CATV line converting section having functions of converting and reversely converting an interface of a CATV line to an ICS network frame transferable in an ICS network.

151. An integrated information communication system wherein a transmission ICS user frame is inputted from an ICS logical terminal of an access control device at a termination of a user communication line, and an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to the ICS logical terminal at a transmitting side and an external transmission ICS user frame, and an ICS logical terminal at an incoming side to which the transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address; and

the access control device is connected to a telephone line, an ISDN line, a CATV line, a satellite line, an IPX line, or a portable telephone line, and even if a transmitting side is any of a telephone line, an ISDN line, a CATV line, a satellite line, an IPX line, or a portable telephone line, any of a telephone line, an ISDN line, a CATV line, a satellite line, an IPX line, or a portable telephone line of a receiving side can be selected.

152. A communication function circuit comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address, a sender ICS user address, and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a sender ICS user address and a receiver user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame transmitted from the access control device to an interior of an integrated information communication system is selected by using transmission priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

153.   A communication function circuit comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address, a sender ICS user address, and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a sender ICS user address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame received at an access control device from an interior of the ICS is selected by using incoming priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

154. A communication function circuit comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame transmitted from the access control device to an interior of an integrated information communication system is selected by using transmission priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

155. A communication function circuit comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a receiver user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame received at an access control device from an interior of the ICS

is selected by using incoming priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

156. A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address, a sender ICS user address, and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a sender ICS user address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal.

157. A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal.

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158.   A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address, a sender ICS user address, and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a sender ICS user address and a receiver user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame transmitted from the access control device to an interior of an integrated information communication system is selected by using transmission priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

159. A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address, a sender ICS user address, and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a sender ICS user address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame received at an access control device from an interior of an

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integrated information communication system is selected by using incoming priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

160.   A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a receiver ICS user address included in the ICS user frame are registered together in a record of the conversion table section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame transmitted from the access control device to an interior of an integrated information communication system is selected by using transmission priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

161.   A communication function program module comprising:

a conversion table section including one or more records registered such that an incoming ICS network address is set uniformly when a set of a transmission ICS network address and a receiver ICS user address is determined; and

a function section which, as a transmitting side, inputs an ICS user frame inputted from an ICS logical terminal and an ICS network address given to the ICS logical terminal, and converts the ICS user frame to an ICS network frame when it is found that the ICS network address and a receiver user address included in the ICS user frame are registered together in a record of the conversion table

section, and which, as an incoming side, restores the ICS user frame from the ICS network frame and transmits it to another ICS logical terminal,

wherein, with reference to a higher order protocol in the transmission ICS user frame, the priority at a next stage of an IP frame received at an access control device from an interior of an integrated information communication system is selected by using incoming priority information of a conversion table in the access control device in accordance with a type of the higher order protocol.

162.   A method of identifying closed network and LAN, wherein

in an integrated information communication system in which an internal ICS network address is determined by using a conversion table of an access control device on the basis of ICS logical terminal information at a transmitting side, and a sender ICS user address and a receiver ICS user address in an external ICS user frame, and the external user frame is converted to the ICS network frame by using the determined ICS network address, and the ICS network frame is transferred through an interior and reaches an access control device of an incoming side, and the external ICS user frame is restored, and an ICS logical terminal at an incoming side is determined by using at least an incoming ICS network address in the ICS network frame,

by using the sender ICS user address in the external ICS user frame, a closed network is identified as a range segment of the sender ICS user address, and a LAN, which includes a transmission source IP terminal connected to a user communication line connected to the ICS logical terminal at the transmitting side, is identified.

163.   An integrated information communication system comprising two or more access control devices, wherein the access control devices include a conversion table, and an ICS user frame sent by a user is inputted to an access control device at a transmitting side via an ICS logical terminal at a termination of a user communication line;

a processor of the access control device at the transmitting side presents to a domain name server an ICS domain name designating a receiving user acquired from an interior of the ICS user frame, and acquires a receiver ICS user address of a receiving user, and the processor presents the

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acquired receiver ICS user address to an ICS address managing server and acquires an ICS network address and address related information corresponding to the ICS user address, and the processor writes the acquired receiver ICS user address, the ICS network address and the address related information into the conversion table of the access control device;

the processor sends back the receiver ICS user address to a transmitting user, and the transmitting user acquires the receiver ICS user address;

the ICS user frame sent by the user at the sending side is inputted to the access control device at the transmitting side via the ICS logical terminal at the termination of the user communication line, and the ICS user frame becomes an ICS network frame, and the ICS user address, the ICS network address, and the address related information which are written in the conversion table as new records are used;

the ICS network frame is transferred through an interior of the integrated information communication system and reaches the access control device at the incoming side, and the ICS user frame is restored from the ICS network frame in the access control device at the incoming side, and the restored ICS user frame reaches another user via the user communication line at the receiving side; and

IP frame communication is carried out by using the newly written records of the conversion table.

164. An integrated information communication system according to claim 131, wherein a conversion table server is provided, and the conversion table server registers, in the conversion table, new items of the conversion table formed on the basis of information obtained from the ICS user frame.

165. An integrated information communication system according to claim 133, wherein a conversion table server is provided, and the conversion table server registers, in the conversion table, new items of the conversion table formed on the basis of information obtained from the ICS user frame.

166.   An integrated information communication system, wherein an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to an ICS logical terminal at a transmitting side and an external ICS user frame, and an ICS logical terminal at an incoming side to which a transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address, and a conversion table server registers, in a conversion table, new items of the conversion table which are formed on the basis of information obtained from the ICS user frame.

167.   An access control device for an integrated information communication system, wherein an ICS network address of an internal ICS network frame is determined on the basis of an ICS user address given to an ICS logical terminal at a transmitting side and an external ICS user frame, and an ICS logical terminal at an incoming side to which a transmission ICS network frame is to be transmitted is determined on the basis of the determined ICS network address, and a conversion table server registers, in a conversion table, new items of the conversion table which are formed on the basis of information obtained from the ICS user frame.

168.   An integrated information communication system according to claim 133, wherein a conversion table server is provided, and the conversion table server registers, in the conversion table, new items of the conversion table formed on the basis of information obtained from the ICS user frame.

169.   An integrated information communication system according to claim 131, wherein a conversion table server is provided, and the conversion table server registers, in the conversion table, new items of the conversion table formed on the basis of information obtained from the ICS user frame.

170.   An integrated information communication system according to claim 131 or 133, wherein when the access control device receives an ICS user frame, the access control device reads the type

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of charging method of each ICS frame held in the conversion table on the basis of an ICS user address included in the ICS user frame, and when the read type is a value expressing a measured rate charging method, the access control device generates charging information and transmits the charging information to a charging server as a charging information frame, and when the read contents are a value expressing a flat rate charging method, the access control device charges the user by generating the charging information and transmitting the charging information to the charging server as the charging information frame.

171.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and when telephone communication is carried out, an ICS user address of a communication destination and an ICS network address given to the access control device of the incoming side are acquired on the basis of a telephone number, and the ICS user address and the ICS network address are held in a conversion table in an access control device at a calling side.

172.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and when telephone communication is carried out, an ICS user address of a communication destination and an ICS network address given to the

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access control device of the incoming side are acquired on the basis of a telephone number, and a voice is carried on a ICS user frame.

173.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and a telephone machine is connected via a telephone line from a telephone line control section at an interior of the access control device, and telephone communication is possible.

174.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and in the access control device of the incoming side, the ICS network frame connects, to an access control device, a first radio transceiver which has a function of converting internal information of an ICS user frame into a radio wave type ICS user frame and sending it and a function of receiving a radio wave type ICS user frame and reversely converting it into internal information of an ICS user frame, and communication is carried out between the ICS network frame and an IP terminal, in which a second radio transceiver having the same functions as said functions, is built-in.

175.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a

termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and an ICS domain name of a receiver is presented from an exterior IP terminal of the integrated information communication system to a conversion table server at an interior of the integrated information communication system, and the conversion table server forwards an inquiry to a domain name server and acquires an address of a receiver corresponding to the ICS domain name, and the conversion table server rewrites the conversion table.

176. An IP telephone machine comprising at least an IP address storing section, a voice inputting/outputting section, and a voice data transmitting/receiving section, the IP telephone machine generating an ICS user frame including a telephone number of a destination telephone machine and transmitting it to an ICS user communication line, wherein an ICS user address in the ICS user frame is the ICS user address of the telephone machine included in the IP address storing section and the ICS user address of an inquiry destination server, and the ICS user frame which stores the ICS user address of the destination telephone machine is received from the ICS user communication line, and a voice is inputted from the voice inputting/outputting section, and the voice is converted to a digital voice in the voice transmitting/receiving section and is stored in the ICS user frame and is transmitted to the destination telephone machine, and thereafter, telephone communication is carried out by transmitting and receiving the ICS user frame, and the ICS user address in the ICS user frame including the digital voice is the ICS user address of the telephone machine and the ICS user address of the acquired destination telephone machine.

177. An IP terminal comprising at least an ICS domain name and an ICS user address of the IP terminal, an ICS user address of a registration server, and a code function and a code related data, and further comprising a function which generates an ICS user frame and transmits and receives it,

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wherein a user of the IP terminal connects the IP terminal to a position of a home IP terminal and generates an ICS user frame including at least an ICS domain name and an ICS user address of the IP terminal and transmits it to a user communication line, and an address of the ICS user frame is the ICS user address of the IP terminal and the ICS user address of the registration server, and the IP terminal can receive an ICS user frame including a report of the registration from the user communication line.

178.   An IP telephone machine, wherein an integrated information communication system includes two or more access control devices, and a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device of a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and the IP telephone machine includes at least an IP address storing section, a voice inputting/outputting section, and a voice data transmitting/receiving section, and, when telephone communication is carried out, generates an ICS user frame including a telephone number of a destination telephone machine and transmits it to an ICS user communication line, and the ICS user address in the ICS user frame is the ICS user address of the telephone machine included in the IP address storing section and the ICS user address of an inquiry destination server, and the ICS user frame which stores the ICS user address of the destination telephone machine is received from the ICS user communication line, and a voice is inputted from the voice inputting/outputting section, and the voice is converted to a digital voice in the voice transmitting/receiving section and is stored in the ICS user frame and is transmitted to the destination telephone machine, and thereafter, telephone communication is carried out by transmitting and receiving the ICS user frame, and the ICS user address in the ICS user frame including the digital voice is the ICS user address of the telephone machine and the ICS user address of the acquired destination telephone machine.

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179.   An integrated information communication system comprising at least an IP address storing section, a voice inputting/outputting section, and a voice data transmitting/receiving section, the IP telephone machine generating an ICS user frame including a telephone number of a destination telephone machine and transmitting it to an ICS user communication line, wherein an ICS user address in the ICS user frame is the ICS user address of the telephone machine included in the IP address storing section and the ICS user address of an inquiry destination server in the integrated information communication system, and the ICS user frame which stores the ICS user address of the destination telephone machine is received from the ICS user communication line, and a voice is inputted from the voice inputting/outputting section, and the voice is converted to a digital voice in the voice transmitting/receiving section and is stored in the ICS user frame and is transmitted to the destination telephone machine, and thereafter, telephone communication is carried out by transmitting and receiving the ICS user frame, and communication is carried out by connecting to the IP telephone machine which carries out communication on the basis of the fact that the ICS user address in the ICS user frame including the digital voice is the ICS user address of the telephone machine and the ICS user address of the acquired destination telephone machine.

180.   An integrated information communication system comprising two or more access control devices, wherein a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device at a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side, and the ICS network frame is restored as the ICS user frame in the access control device of the incoming side, and the ICS user frame includes a digitized voice.

181.   An IP terminal comprising at least an ICS domain name and an ICS user address of the IP terminal, an ICS user address of a registration server, and further comprising a function which generates an ICS user frame and transmits and receives it, wherein a user of the IP terminal connects

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the IP terminal to a position of a home IP terminal and generates an ICS user frame including at least an ICS domain name and an ICS user address of the IP terminal and transmits it to a user communication line, and an address of the ICS user frame is the ICS user address of the IP terminal and the ICS user address of the registration server, and the IP terminal can receive an ICS user frame including a report of the registration from the user communication line.

182.   An IP terminal, wherein an integrated information communication system includes two or more access control devices, and a transmission ICS user frame is inputted from an ICS logical terminal at a termination of a user communication line, and the transmission ICS user frame becomes an ICS network frame in an access control device at a transmitting side, and the ICS network frame is transferred through an interior of the integrated information communication system and reaches an access control device of an incoming side and is restored as the ICS user frame, and in the access control device of the incoming side, the ICS network frame includes at least an ICS domain name of the IP terminal, an ICS user address given to the access control device of the incoming side, and a function generating an ICS user address and an user ICS frame of a registration server and transmitting and receiving them, and a user of the IP terminal connects the IP terminal to a position of a home IP terminal and generates an ICS user frame including at least an ICS domain name and an ICS user address of the IP terminal and transmits it to the user communication line, and the address of the ICS user frame is the ICS user address of the IP terminal and the ICS user address of the registration server, and the IP terminal can receive the ICS user frame including a report of the registration from the user communication line.

183.   An IP terminal comprising at least an IP address storing section, a voice inputting/outputting section, and a voice data transmitting/receiving section, and generating an ICS user frame including a telephone number of a destination IP terminal and transmitting it to an ICS user communication line, wherein an ICS user address in the ICS user frame is the ICS user address of said IP terminal included in the IP address storing section and the ICS user address of an inquiry destination server, and the ICS user frame which stores the ICS user address of the destination IP terminal is received from the

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ICS user communication line, and a voice is inputted from the voice inputting/outputting section, and the voice is converted to a digital voice in the voice transmitting/receiving section and is stored in the ICS user frame and is transmitted to the destination IP terminal, and thereafter, telephone communication is carried out by transmitting and receiving the ICS user frame, and the ICS user address in the ICS user frame including the digital voice is the ICS user address of said IP terminal and the ICS user address of the acquired destination IP terminal.

184.   A communication method comprising at least an IP address storing section, a voice inputting/outputting section, and a voice data transmitting/receiving section, and generating an ICS user frame including a telephone number of a destination IP terminal and transmitting it to an ICS user communication line, wherein an ICS user address in the ICS user frame is the ICS user address of said IP terminal included in the IP address storing section and the ICS user address of an inquiry destination server, and the ICS user frame which stores the ICS user address of the destination IP terminal is received from the ICS user communication line, and a voice is inputted from the voice inputting/outputting section, and the voice is converted to a digital voice in the voice transmitting/receiving section and is stored in the ICS user frame and is transmitted to the destination IP terminal, and thereafter, telephone communication is carried out by transmitting and receiving the ICS user frame, and the ICS user address in the ICS user frame including the digital voice is the ICS user address of said IP terminal and the ICS user address of the acquired destination IP terminal.